

ELIMINATION OF WELD IN CERAMIC METAL
HALIDE ELECTRODE-LEADWIRE

5 ABSTRACT OF THE DISCLOSURE

10 An apparatus for improving the performance of a ceramic metal halide (CMH) lamp includes an interior chamber (12) disposed within an outer envelope (10). In a preferred arrangement, two legs (14, 16) extend laterally in opposite directions from the chamber. Each leg encloses an electrode/leadwire assembly (22, 24). The electrode/leadwire assembly is constructed from a single continuous piece of wire, preferably tungsten, 15 which forms a shaft or mandrel (50). One end of the mandrel supports an electrode tip (52) which is also preferably made from tungsten. The mandrel also supports an overwind component (54) at a predetermined position. In a desired arrangement, the overwind component is made 20 from molybdenum. The single or one-piece mandrel negates the need for a welded shank assembly resulting in a stronger and more stable lamp that is less expensive to manufacture.